Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 90 of the Commission's	)	
Rules to Provide for Flexible Use of the	)	
896-901 MHz and 935-940 MHz Band Allotted	)	
to the Business and Industrial Land	)	WT Docket No. 05-62
Transportation Pool	)	
	)	
Oppositions and Petitions for	)	
Reconsideration of 900 MHz Band	)	
Freeze Notice	)	

To: The Commission

REPLY COMMENTS OF THE
ENTERPRISE WIRELESS ALLIANCE

Respectfully submitted,

ENTERPRISE WIRELESS ALLIANCE

/s/ Mark E. Crosby
President/CEO
8484 Westpark Drive, Suite 630
Mclean, Virginia 22102
(703) 528-5115

Of Counsel:
Elizabeth R. Sachs
Lukas, Nace, Gutierrez & Sachs, Chartered
1650 Tysons Blvd., Ste. 1500
McLean, VA 22102
(703) 584-8678

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SUMMARY

The Enterprise Wireless Alliance supports the FCC's proposal to permit more flexible use of the 900 MHz B/ILT Pool channels to the extent flexibility is needed to facilitate the 800 MHz reconfiguration effort. The Alliance does not oppose the use of competitive bidding to achieve that objective. However, the Commission's proposal to auction all 900 MHz B/ILT channels nationwide goes substantially beyond the relief needed for that purpose. Since neither Nextel's iDEN network nor public safety 800 MHz operations themselves are nationwide in scope, a more targeted approach would facilitate the reconfiguration process while preserving spectrum opportunities for PLMR users outside the markets in which reconfiguration assistance is required.

Specifically, EWA recommends the use of 900 MHz B/ILT overlay auctions only in those markets in which all of the following conditions are met: (1) Nextel operates the iDEN network; (2) there are operational 800 MHz public safety systems or systems that will be deployed before 800 MHz reconfiguration in the area is completed; and (3) Nextel has inadequate 800 MHz and 900 MHz SMR spectrum to accommodate reconfiguration. This determination should be made based on additional documentation provided by Nextel and the public safety community. Spectrum outside those markets should continue to be available for site-based licensing, including public safety digital paging, with the commercial conversion rights granted in the 800 MHz proceeding.

The Alliance recommends that when auctions are necessary, the FCC should use BEAs rather than the larger MEAs and should auction spectrum in 19 blocks of 10 contiguous channels and 1 block of 9 contiguous channels. It also should modify the proposed bidding credits to the 25% and 35% that has become the standard for FCC competitive bidding proceedings.

Consistent with the FCC's desire to increase licensee flexibility, site-based 900 MHz B/ILT incumbents should be permitted to modify or relocate their stations within their 22 dBμV/m contours like their 800 MHz counterparts. The FCC also should confirm that the protected 40 dBμV/m contour for a 900 MHz site-based system is defined by the maximum permissible ERP rather than the licensed ERP. Additionally, the FCC should eliminate the current loading requirement applicable to B/ILT licensees.

Finally, EWA encourages the FCC to undertake a thorough examination of the interference potential in this band as part of this proceeding and to adopt appropriately prophylactic rules. The solution may or may not mirror the 800 MHz approach, but it must be intended to produce the same interference-free result. Since Nextel has committed only to follow voluntary "Best Practices" and to work cooperatively in mitigating problems, practices that proved inadequate at 800 MHz, it is incumbent upon the FCC to take a proactive approach to this matter.

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ENTERPRISE WIRELESS ALLIANCE

The Enterprise Wireless Alliance ("EWA" or "Alliance"), in accordance with Section 1.415 of the Federal Communications Commission ("FCC" or "Commission") rules and regulations, respectfully submits its reply comments in the above-entitled proceeding.[1] The Alliance supports the Commission's proposal to permit more flexible use of the 900 MHz Business and Industrial/Land Transportation ("B/ILT") Pool channels *to the extent flexibility is needed to facilitate the 800 MHz reconfiguration effort*.[2] It does not oppose the use of competitive bidding to achieve that objective. However, the record in this proceeding does not address the pivotal issue: the NPR does not discuss or specifically seek information that would

[1] *Notice of Proposed Rulemaking and Memorandum Opinion and Order*, WT Docket No. 05-62, 20 FCC Rcd 3814 (2005) ("Notice" or "NPR")
[2] *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, WT Docket No. 02-55, 19 FCC Rcd 14969 (2004) ("800 MHz Order"); S*upplemental Order and Order on Reconsideration*, WT Docket No. 02-55, 19 FCC Rcd 25120 (2004).

enable the FCC to identify in which markets such relief is needed. The Notice proposes a nationwide auction solution to resolve a substantially less than nationwide problem.

EWA recommends that the scope of the proceeding be focused on its fundamental objective – the facilitation of the 800 MHz reconfiguration process. The Alliance also recommends changes in certain of the competitive bidding provisions proposed in the Notice and supports greater flexibility for incumbent licensees. Finally, EWA urges the Commission to heed the 800 MHz experience and take particular care to ensure that a similar interference problem does not arise in the 900 MHz band.

I. INTRODUCTION

EWA represents a broad alliance of business enterprise users, service providers, radio dealers and technology manufacturers, all of which use or provide wireless telecommunications products or services. The Alliance is the successor organization to the Industrial Telecommunications Association, Inc. ("ITA") and the American Mobile Telecommunications Association, Inc. ("AMTA") which have consolidated their operations within EWA. Both organizations represented the interests of their respective constituencies before the Commission for many years. Together they represent all categories of 900 MHz incumbents, including those operating private, internal and newly authorized third party commercial systems on the 900 MHz B/ILT spectrum under consideration herein. Included within the EWA is the USMSS, whose Motorola service station members will have an integral role in the 800 MHz reconfiguration effort. The breadth of EWA's collective membership and its long-standing experience with matters involving the 800/900 MHz bands qualifies the Alliance to submit the following reply comments in the instant proceeding.

II. BACKGROUND

Historically the 900 MHz band had been divided into discrete allocations for Business, Industrial/Land Transportation and Specialized Mobile Radio ("SMR") licensees. More recently, in the 800 MHz Order, the FCC adopted two rule changes applicable to the band. First, it consolidated the B/ILT Pools into a single allocation with eligible entities permitted to acquire licenses on any of the consolidated channels.[3] Second, it provided for operational flexibility in the band by allowing licensees operating on the B/ILT channels ("PLMR Users") heretofore reserved for private, internal systems to convert their authorizations to commercial status or to assign them to entities providing commercial service.[4]

A number of parties had supported both proposed changes, although objections to allowing conversion to commercial status were raised by some commenters. The Commission's decision to permit this conversion right relied not only on general record support, but was premised specifically on the relationship between this rule change and the success of the 800 MHz reconfiguration process. In announcing its decision to adopt rules permitting conversion, the Commission stated the following:

> In particular, we note that Nextel will have to shift some of its operations from the 800 MHz band to 900 MHz in order to provide the "green space" necessary to effect reconfiguration of the 800 MHz band.[5]

Shortly thereafter, the FCC announced a freeze on the acceptance of applications for new 900 MHz B/ILT systems.[6] The Commission explained its action as follows:

> We are concerned that additional such [900 MHz B/ILT] filings may compromise Nextel's ability to obtain the necessary "green space" to house some of its

[3] 800 MHz Order at ¶ 334.
[4] Id. at ¶ 337.
[5] Id. at ¶ 336.
[6] *See* "Wireless Telecommunications Bureau Freezes Applications in the 900 MHz Band," *Public Notice*, 19 FCC Rcd 18277 (2004) ("Freeze Order").

> systems while the 800 MHz band is reconfigured to abate unacceptable interference to Public Safety, Critical Infrastructure, and other "high site" 800 MHz systems."[7]

Subsequently, and seemingly in response to the "green space" issue referenced in both the 800 MHz Order and the Freeze Order, the Commission adopted the instant Notice. However, the NPR goes substantially beyond crafting an approach that would permit Nextel to fulfill its 800 MHz reconfiguration obligations by providing flexibility in markets in which it may need 900 MHz B/ILT spectrum to accommodate its systems during the transition. It proposes overlay auctions for **all** 900 MHz B/ILT channels in **all** markets, a solution that substantially exceeds the scope of the problem and fails to equitably balance the needs of all parties with a cognizable interest in this band.

Contrary to the implication in the Notice, "facilitating the provision of telecommunications services to consumers"[8] and "providing service to the public consistently and expeditiously, and allowing the marketplace to respond to consumer demands"[9] while important, are not manifestly superior to all other ways of satisfying the public interest. The public is best served if there are communications opportunities for both commercial systems providing innovative service to consumers and by private systems that support the critical communications requirements of the broad range of American businesses. The latter provide vital products and services, other than communications services, that support life, competitiveness and business productivity. It is neither necessary nor publicly beneficial to sacrifice the interests of one type of licensee in favor of the other. EWA urges the FCC to achieve "a fair and equitable balance between the interests of incumbent B/ILT licensees, and

[7] Id.
[8] Notice at ¶ 1.
[9] Id. at ¶ 3.

those seeking to provide geographic area service"[10] by modifying the proposed rules as detailed herein.

III. OVERLAY AUCTIONS ON 900 MHz B/ILT CHANNELS SHOULD BE CONDUCTED ONLY IN MARKETS WHERE THE RECORD SUPPORTS NEXTEL'S NEED FOR "GREEN SPACE" TO FACILITATE 800 MHz RECONFIGURATION

The Alliance endorses Commission actions that are necessary for successful completion of the 800 MHz reconfiguration process. Many of its members will be required to relocate to replacement channels under those rules. They and EWA want the process to be completed as quickly and with as little disruption as possible.

The FCC already has taken an important step in assisting Nextel to create "green space" in support of that effort by permitting the conversion of 900 MHz B/ILT channels to commercial status. Of course, all or effectively all such channels have long been assigned in major urban areas so the green space opportunities are quite limited. Assuming Nextel demonstrates a need for additional capacity in those markets, capacity above and beyond the almost two hundred (200) 900 MHz SMR channels it typically holds throughout the country, it will need to acquire the authorizations of incumbents and already has begun to do so. To the extent its reconfiguration activities also would be facilitated by having the flexibility afforded by overlay geographic licenses, EWA does not oppose the use of competitive bidding to serve that purpose.

However, the record contains no information that would permit the FCC to determine in what markets such flexibility is required. The NPR appears to assume that the need is nationwide. However that surely is not the case. Nextel's iDEN network is national in scope, but its operations currently are focused in major markets and the corridors that connect them. The coverage map on its website confirms that there are large geographic areas in which Nextel

[10] Id. at ¶ 4.

does not yet provide iDEN service. Capacity for its users should not be an issue in such regions. Additionally, public safety does not use 800 MHz spectrum in every part of the country. Like Nextel, public safety use of this band typically is concentrated in and around more urbanized areas. Moreover, as noted above, Nextel already holds a substantial number of geographic licenses for 900 MHz SMR spectrum.

Thus, it would appear that "green space" is needed only in those markets in which all of the following conditions are met: (1) Nextel operates the iDEN network; (2) there are operational 800 MHz public safety systems or systems that will be deployed before 800 MHz reconfiguration in the area is completed; and (3) Nextel has inadequate 800 MHz and 900 MHz SMR spectrum to accommodate reconfiguration. Assuming Nextel and the public safety community supplement the record by identifying markets in which these conditions are met, the FCC will be able to determine in which areas geographic overlay licenses on 900 MHz B/ILT channels will be needed to support the 800 MHz reconfiguration process. Areas outside those markets should remain available for continued B/ILT site-based licensing with the commercial conversion rights granted in the 800 MHz Order.

EWA believes this geographic bifurcation will enhance overall spectrum utilization. While the Notice suggests that geographic licensing on a nationwide basis will promote efficient use of these channels and Nextel characterizes current use of this spectrum as "gross underutilization,[11] neither the record in this proceeding nor the ULS database support such conclusions. In fact, and similar to utilization patterns in most bands and services, 900 MHz B/ILT spectrum is heavily used in areas of greatest population and much more lightly deployed in more rural areas. The Notice describes usage within the band as follows:

[11] Nextel Comments at p 1.

> According to the Commission's Universal Licensing System (ULS) database, there are 1,774 licensees at 10,059 discrete sites in the 900 MHz B/ILT Pool. While the service is used throughout the country, we note that the greatest number of stations appear to be clustered along the coastal Northeast (Pennsylvania through Massachusetts), the Carolinas, Florida, the Great Lakes region (Wisconsin through Michigan), and the Gulf Coast area (Louisiana through the Texas coast). We also see a large demand for the areas of central Texas north to Kansas (including Oklahoma), coastal Washington State, and northern and southern California, both coast and inland. There is less demand for this spectrum in all other parts of the American West and upper Midwest, the Mississippi Valley, and the inland Northeast (Maine through the Virginias). Demand is greatest in more populated counties, with 8,341 unique sites, while rural counties have 1,579 such sites.[12]

This description is markedly similar to the Nextel iDEN coverage map. Thus, the public interest question is which category of user is more likely to use these channels in some reasonable time period outside the areas in which they already are intensively deployed.

The Alliance has no doubt that Nextel will continue to expand its network. Should it acquire nationwide geographic rights to most or all of these 900 MHz B/ILT channels (a result suggested by Nextel's successful participation in the 800 MHz auctions) it may someday deploy even these channels outside the more urbanized areas of the country. But that is not where 800 MHz reconfiguration is an issue or where Nextel needs additional capacity at any foreseeable future date. The spectrum would be acquired for the enhanced flexibility and capacity it would provide Nextel in core markets. There simply is no evidence that Nextel or any other commercial operator would use this spectrum to "respond to consumer demands" outside those areas.

By contrast, the spectrum requirements of PLMR users have only a tangential relationship with population size. Utilities, petrochemical facilities, distribution centers, pipelines, manufacturing plants and numerous other B/ILT-type operations often are located outside major urban areas where land and other necessary resources may be better suited to

[12] Notice at ¶ 10 (footnote omitted).

support enterprise business operations. Their locations depend on myriad factors unique to their particular operating requirements. EWA submits that there is a much greater likelihood that these entities will put 900 MHz B/ILT channels to productive use in a spectrum efficient manner outside the areas in which "green space" is needed for 800 MHz reconfiguration purposes than would Nextel, SouthernLINC or any other consumer-oriented commercial service provider. For this reason, EWA believes that market-by-market bifurcation is preferential to the suggestion of those parties that have urged the FCC to set aside some portion of the 900 MHz B/ILT spectrum for continued use by eligible PLMR entities.[13] In the markets in which "green space" is needed, there likely are no channels to be set aside; they have been licensed to eligible entities for many years. Outside those areas, the better approach is to retain a site-based licensing system for all 900 MHz B/ILT channels since they will not be needed to facilitate 800 MHz reconfiguration and are unlikely to be utilized by commercial operators for the foreseeable future. Moreover, in response to the request of the National Public Safety Telecommunications Council (NPSTC), the Alliance would expand eligibility for this spectrum to include digital paging systems operated by public safety entities.[14] It does not believe that a set-aside is needed for this relatively limited purpose. Rather, such applicants should submit requests through authorized Frequency Advisory Committees and channel assignments should be made consistent with sound spectrum management principles. Of course, the FCC will retain the right to revisit this entire issue should

[13] *See*, e.g., Joint Comments of Association of American Railroads, American Petroleum Institute, MRFAC, Inc., National Association of Manufacturers, United Telecom Council ("Joint Comments"); Aeronautical Radio, Inc.; Florida Power & Light Company; PCIA – The Wireless Infrastructure Association. The NPR included an option to dedicate the upper four channels blocks to traditional B/ILT services. Notice at ¶ 30. It is not clear whether the FCC intended to reserve this or some other spectrum for continued site-based licensing by PLMR Users or simply to limit initial auction eligibility for some subset of channel blocks. Most PLMR commenters assumed the FCC intended the former.

[14] Comments of National Public Safety Telecommunications Council.

it determine that there is compelling consumer demand in these areas and the PLMR community has not sought use of the spectrum.

IV. AUCTION ISSUES

A. Size of Geographic Service Areas/Channel Blocks

The Alliance agrees with those parties that recommended use of BEAs, rather than MEAs, as the appropriate geographic area for 900 MHz B/ILT auctions.[15] Smaller BEAs are better suited for the targeted market approach recommended herein. However, even if the FCC were to conduct a nationwide auction, BEAs would be preferable because they permit meaningful participation by a much larger group of prospective bidders. The Commission has used BEAs in numerous successful auctions involving a wide range of service types. They even were used in the 800 MHz auctions in which Nextel was highly successful in acquiring significant amounts of spectrum throughout the country.

Contrary to the Notice, there is no evidence that use of the MEA-comparable MTAs in the original 900 MHz SMR auctions promoted the availability of service in areas in which users otherwise might have been without adequate options.[16] A review of 900 MHz SMR service likely would demonstrate that it is available in and around major urban markets with little or no deployment in lightly populated communities. This is not to criticize 900 MHz SMR operators who have built systems where supported by marketplace demand and who have satisfied the FCC's build-out requirements. It simply recognizes that using larger geographic areas is no assurance that spectrum will be used effectively throughout such areas.

EWA agrees with the Commission that the spectrum should be auctioned in nineteen (19) blocks of ten (10) contiguous channels and one (1) block of nine (9) contiguous channels. It also

[15] *See*, e.g., Comments of SouthernLINC, Joint Comments, and Florida Power & Light Company.
[16] Notice at ¶ 23.

agrees that there should be no limitations on the number of blocks a party may acquire during or after the auction.

B. Bidding Credits

EWA disagrees with the FCC's proposal to allow bidding credits of only ten percent (10%) for small businesses and fifteen percent (15%) for very small businesses. The Notice does not provide any reason for its reversion to such a low level of bidding credits, one that has not been used since the original 900 MHz SMR auction almost a decade ago. Instead, the Commission should permit twenty-five percent (25%) and thirty-five percent (35%) credits for small and very small businesses respectively as it has done in virtually all recent auctions.

C. Incumbent Flexibility

Consistent with the FCC's desire to increase flexibility for all licensees, the Alliance agrees with the recommendation of certain parties that site-based 900 MHz B/ILT incumbents be permitted to modify or relocate their stations within their 22 dBμV/m contours,[17] a flexibility already available to their 800 MHz counterparts.[18] This would eliminate an unexplained distinction between incumbent systems in those two bands without imposing additional obligations on co-channel geographic licensees. Just as in the 800 MHz band, incumbent protection still would be predicated on protection of the 40 dBμV/m service contour as set out in FCC Rule Section 90.621(b).[19] Consistent with comparable 800 MHz rules, the FCC also should confirm that the protected contour for a 900 MHz site-based system is defined by the maximum permissible ERP rather than the licensed ERP.[20]

[17] *See* Joint Comments at pp. 29-30
[18] 47 C.F.R. § 90.693(a).
[19] 47 C.F.R. § 90.621(b).
[20] *See* 47 C.F.R. § 90.621(b)(6).

Further, the Alliance agrees that the Commission should eliminate the existing B/ILT loading requirement.[21] As described in the Joint Comments, that requirement already has lost much of its significance and would be inconsistent with the option to convert systems to commercial status.[22] EWA also supports the Joint Comments recommendations regarding the number of 900 MHz B/ILT channels that could be requested at one time and the showing required to acquire additional channels.[23]

V. INTERFERENCE PROTECTION

Virtually every party in this proceeding has identified appropriate interference protection as essential to whatever other action the FCC takes in respect to 900 MHz B/ILT spectrum.[24] Indeed, even if the Commission determined not to proceed with overlay auctions, interference still would be an issue since Nextel already is deploying its 900 MHz SMR channels in its iDEN network.[25]

The Alliance does not need to remind the Commission of the sometimes intractable interference caused by cellular architecture networks to high-site systems in the 800 MHz band or the FCC's conclusion that the problem arose because of the incompatibility of these system architectures operating on channels that were interleaved or in close proximity.[26] EWA is confident that no one involved in either band wishes to replicate that experience and expects all parties to work cooperatively to avoid that possibility.

The Commission apparently had the same expectation when it originally determined to permit the conversion of 900 MHz B/ILT channels to commercial status. It stated it assumed

[21] Notice at ¶ 52.
[22] Joint Comments at pp. 24-25. *See* also Comments of United Parcel Service ("UPS") at pp. 7-8.
[23] Id.
[24] *See*, e.g., Joint Comments, Comments of UPS, Florida Power & Light Company.
[25] Nextel Comments at p. 17.
[26] *See*, e.g., 800 MHz Order at ¶ 88.

Enhanced Specialized Mobile Radio (ESMR) licensees would take interference abatement into account when designing systems from the ground up given the 800 MHz experience.[27] It also affirmed that it would take action promptly if it appeared that interference was likely to develop.[28]

EWA encourages the FCC to undertake a thorough examination of the interference potential in this band as part of this proceeding and to adopt appropriately prophylactic rules. The agency's already extensive involvement in the technical aspects of the 800 MHz problem should permit it to complete an analysis quickly, perhaps with additional cooperation from affected industry members, including equipment manufacturers. The solution may or may not mirror the 800 MHz approach, but it must be intended to produce the same interference-free result. In light of Nextel's position that voluntary "Best Practices" and a commitment to work cooperatively in mitigating problems satisfies its obligation to protect other licensees from destructive interference, it is not clear that they have undertaken the anticipated interference-abatement system design process.[29] The approach they intend to follow proved inadequate at 800 MHz; there is no reason to believe it will be more effective at 900 MHz. Therefore it is incumbent upon the FCC to take a proactive approach to this matter.

VI. CONCLUSION

For the reasons described herein, EWA urges the FCC to adopt positions consistent with the Alliance's recommendations.

[27] 800 MHz Order at ¶ 336.
[28] Id.
[29] Nextel Comments at pp. 16-17.